

Listing of the Claims

1. (previously presented) An interface device for a computer having a file system that controls a file cache, the interface device comprising:
 - interface hardware configured to process a transport layer header of a packet received via a first physical network port, and to separate said transport layer header from data of said packet, wherein said data corresponds to a layer higher than said transport layer;
 - an interface memory adapted to store a TCP connection established by the computer and handled by said device, said memory adapted to store said data in said file cache; and
 - an interface mechanism for associating said packet with said TCP connection and said TCP connection with said file cache to send said data from said packet via a second physical network port to a storage unit, thereby avoiding the computer.
2. (original) The interface device of claim 1, further comprising a SCSI controller connectable to the storage unit.
3. (previously presented) The interface device of claim 1, wherein said first network port is connected to a first network and said second network port is connected to a second network.
4. (original) The interface device of claim 1, further comprising a Fibre Channel controller connectable to the storage unit.
5. (previously presented) The interface device of claim 1, further comprising a RAID controller connectable to the storage unit.

6. (previously presented) The interface device of claim 1, wherein said file cache is adapted to store said data as a file stream, and the interface device is adapted to send said data as file blocks for storage on the storage unit.

7. (previously presented) The interface device of claim 1, wherein said data is mapped from a logical file format of said file cache to a physical block format of the storage unit.

8 – 20 (canceled)

21. (previously presented) An interface device for a computer having a file system that controls a file cache, the interface device comprising:

an interface receive mechanism that processes a Transmission Control Protocol (TCP) header of a network packet, and separates said header from data of said packet, wherein said data corresponds to a layer higher than said transport layer;

an interface memory storing an established TCP connection that can migrate to and from the computer, said memory storing said data in said file cache; and

an interface processing mechanism that associates said packet with said TCP connection and said TCP connection with said file cache to send said data from said packet via a physical network port to a storage unit, thereby avoiding the computer.

22. (previously presented) The interface device of claim 21, further comprising a SCSI controller connectable to the storage unit.

23. (previously presented) The interface device of claim 21, further comprising a plurality of physical network ports.

24. (previously presented) The interface device of claim 21, further comprising a Fibre Channel controller connectable to the storage unit.

25. (previously presented) The interface device of claim 21, further comprising a RAID controller connectable to the storage unit.

26. (previously presented) The interface device of claim 21, wherein said file cache is adapted to store said data as a file stream, and the interface device is adapted to send said data as file blocks for storage on the storage unit.

27. (previously presented) The interface device of claim 21, wherein said data is mapped from a logical file format of said file cache to a physical block format of the storage unit.

28. (previously presented) A method for operating an interface device for a computer having a file system that controls a file cache, the interface device connectable to a network and a storage unit, the method comprising:

receiving, by the interface device from the network, a packet containing data and a Transmission Control Protocol (TCP) header,

processing, by the interface device, the TCP header,

storing, on the interface device, a TCP connection that can migrate to and from the computer,

associating, by the interface device, the packet with the TCP connection,

storing, on the interface device, the data from the packet in the file cache, and

sending, by the interface device, the data from the file cache to the storage unit via a physical network port, thereby avoiding the computer.

29. (previously presented) The method of claim 28, further comprising creating, by the computer, information regarding the TCP connection.

30. (previously presented) The method of claim 28, wherein the packet is received via the port and the data is sent to the storage unit via the port.

31. (previously presented) The method of claim 28, wherein the interface device includes first and second physical network ports, and the packet is received via the first port and the data is sent to the storage unit via the second port.

32. (previously presented) The method of claim 28, wherein sending the data from the file cache includes sending the data as file blocks for storage on the storage unit.

33. (previously presented) The method of claim 28, further comprising adding a network protocol header to the data for sending the data to the storage unit.